



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.              | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-------------|----------------------|---------------------|------------------|
| 10/529,831                   | 03/30/2005  | Martin-Peter Bolz    | 081276-1057-00      | 1633             |
| 23409                        | 7590        | 08/16/2007           | EXAMINER            |                  |
| MICHAEL BEST & FRIEDRICH LLP |             |                      | TRIEU, THAI BA      |                  |
| 100 E WISCONSIN AVENUE       |             |                      |                     |                  |
| Suite 3300                   |             |                      | ART UNIT            | PAPER NUMBER     |
| MILWAUKEE, WI 53202          |             |                      | 3748                |                  |
|                              |             |                      |                     |                  |
|                              |             |                      | MAIL DATE           | DELIVERY MODE    |
|                              |             |                      | 08/16/2007          | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/529,831             | BOLZ, MARTIN-PETER  |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Thai-Ba Trieu          | 3748                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication; even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 19 July 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1,2,4-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 21 is/are allowed.
- 6) Claim(s) 1,2,4-15 and 17-19 is/are rejected.
- 7) Claim(s) 16 and 20 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' Amendments filed on July 19, 2007 have been carefully considered but are non-persuasive. The specification has been amended to overcome the informalities set forth in the first Office action. The claims have been amended to adopt the examiner's suggested claim language, and to overcome the claim objections and the rejections under 35 USC 112, second paragraph set forth in the first Office Action. Correction of the above matters is noted with appreciation.

Claims 1-2, 4-16, and 18-20 were amended; claims 3 and 17 were cancelled; and claim 21 was newly added.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-2, 4-6, 8-9, 12-15, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Woollenweber et al. (Patent Number 6,129,524).***

Woollenweber discloses a device to compress combustion air (10), for a combustion engine of a motor vehicle (See Column 1, lines 5-11), with a housing (20), with at least one compressor impeller (16) arranged in a compression area (Not Numbered) of a first housing part (Not Numbered), which is arranged in the flow direction between an air inlet (40) and an air outlet (33) of the housing (20), as well as

Art Unit: 3748

with an electric motor (12) arranged in a second housing part (Not numbered) of the housing (20) to operate the compressor impeller (16), characterized in that a flow channel (33) running in the circumferential direction of the first housing part (20) and connecting the compression area (Not Numbered) with the air outlet (33) surrounds the electric motor (12) at least partially in the axial direction; and characterized in that the electronic components (22), in particular the electronic components of the motor electronics of the driving electric motor (12) are integrated in such a way in the second housing part (Not Numbered) that the electronics (22) are cooled predominantly via the flow channel (33) (See Figures 4 and 5);

wherein the flow channel (33) is connected with the electric motor (12) and/or the second housing part (Not Numbered);

wherein the second housing part (Not numbered) is comprised at least partially of a heat conducting material (See Column 5, lines 17-36);

wherein the second housing part (Not Numbered) features a diffuser ring (Not Numbered), which forms a portion of the limitation of the flow channel (33) and is thermally coupled to the electric motor (12);

wherein the flow channel (33) is arranged at the high-pressure side of the compressor impeller (16);

wherein the flow channel (33) is arranged on the side of the compressor impeller (16) facing away from the air inlet (40);

wherein the flow channel (33) is connectable with the air inlet (40) of the housing (20) by means via a bypass channel (46) bypassing the compressor impeller (16);

wherein means (48) are provided to close the bypass channel (62) with an activated electric motor (12) (See Figure 5);

wherein the means (48) are self-setting (See Figure 5);

wherein the means (48) are air driven (See Figure 5).

#### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Woollenweber et al. (Patent Number 6,129,524).***

Art Unit: 3748

Woollenweber discloses the invention as recited above; however, Woollenweber fails to disclose the flow channel being embodied as a single piece with the second housing part.

Note that the claimed phrases the flow channel being embodied as a single piece with the second housing part is treated as product by process limitation; that is, the flow channel being embodied as a single piece with the second housing part by casting or by connecting, clamping etc.... As set forth in MPEP 2113, product by process claims are NOT limited to manipulations of the recited steps, only to the structure implied by the steps. Once a product appearing to be substantially the same or similar is found, a 35 USC 102/103 rejection may be made and the burden is shifted to applicant to show an obvious difference. See MPEP 2113.

***Claims 10-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Woollenweber et al. (Patent Number 6,129,524), on view of Prevond et al. (Patent Number FR 2 815 671 A1)***

Woollenweber discloses the invention as recited above; however, Woollenweber fails to disclose a cross-section of the flow channel widening in the circumferential direction of the housing; and having an essentially elliptical shape.

teaches that it is conventional in the turbocharger art having electrical assistance, to utilize the flow channel (Not numbered) featuring a cross-section that widens in the circumferential direction of the housing (Not numbered); and the flow channel (Not numbered) featuring an essentially elliptical cross-section, whereby the large semi-axis

of the ellipse runs essentially parallel to the drive shall (16) of the electric motor (20, 21) (See Figures 3-4, Page 10, lines 8-29).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a cross-section of the flow channel widening in the circumferential direction of the housing; and having an essentially elliptical shape, as taught by Prevond, to improve the efficiency of the Woollenweber device, since the use thereof would have controlled the compressed air into the housing of the turbocharger and protected the mechanical degradations caused by the excess of the engine temperature.

#### ***Allowable Subject Matter***

Claim 21 is allowed.

Claims 16 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed on July 19, 2007 have been fully considered but they are not persuasive. Therefore, claims 1-2, 4-6, 8-9, 12-15, and 18-19, being rejected under 35 U.S.C. 102(b) as being anticipated by Woollenweber et al. are sustained.

Additionally, claims 10-11 are moot in view of the new ground(s) of rejection.

1. With regard to the applicant's arguments set forth on page 8, claim 1 was amended to include the subject matter of original claim 3, which was not rejected as being anticipated by Prevond (FR 2 815 671 A1).

Since the amended claim 1 overcomes the prior art of Prevond (FR 2 815 671 A1), the rejection under 35 U.S.C. 102(b) as being anticipated by Prevond et al. (Patent Number FR 2 815 671 A1) has been withdrawn.

2. With regard to the applicant's arguments set forth on page 9, applicant states that Woollenweber (US 6,129,524), in Figures 3 and 6, discloses the electronic components (22) are always integrated in the external housing (20) leading to a more complex flow channel (generated by an enclosure 44 or by a bypass duct 46), which, furthermore, does not run in a circumferential but in an axial direction as mentioned above.

The examiner respectfully agrees with the applicant that in Figures 3 and 6, Woollenweber the electronic components (22) are always integrated in the extemal housing (20) leading to a more complex flow channel (generated by an enclosure 44 or by a bypass duct 46), which, furthermore, does not run in a circumferential but in an axial direction as mentioned above.

However, in Figures 4 and 5 (emphasis added), Woollenweber the electronic components (22) are always integrated in the external housing (20) leading to a more complex flow channel (generated by an enclosure 44 or by a bypass duct 46), which, runs in a circumferential as being claimed in the amended claim 1.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thai-Ba Trieu  
Primary Examiner  
Art Unit 3748

TTB  
August 12, 2007